Claims

[c1]   What is claimed is:

1.A computer system comprising:

a first processor;

a first serial/parallel data transformer comprising a par-allel port and a serial port;

a second serial/parallel data transformer comprising a parallel port and a serial port; and

a control unit for selectively connecting in an electrical fashion the first processor to the parallel port of the first serial/parallel data transformer, the first processor to both the parallel port of the first serial/parallel data transformer and the parallel port of the second serial/parallel data transformer, or the first processor to the serial port of the first serial/parallel data transformer; and electrically connecting the serial port of the first serial/parallel data transformer to the serial port of the second serial/parallel data transformer.

[c2]   2.The computer system of claim 1 further comprising a serial device electrically connected to the serial port of the first serial/parallel data transformer.

[c3]   3.The computer system of claim 1 further comprising

two serial devices respectively electrically connected to the serial port of the first serial/parallel data transformer and the serial port of the second serial/parallel data transformer.

[c4]   4.The computer system of claim 1 further comprising a second processor electrically connected to the parallel port of the second serial/parallel data transformer.

[c5]   5.The computer system of claim 4 wherein the first processor has an operational voltage equal to that of the second processor.

[c6]   6.The computer system of claim 4 wherein the first processor has an operational voltage different from that of the second processor.

[c7]   7.The computer system of claim 1 further comprising a level shifter electrically connected between the serial port of the first serial/parallel data transformer and the serial port of the second serial/parallel data transformer for adjusting the level of data transmitted between the serial port of the first serial/parallel data transformer and the serial port of the second serial/parallel data transformer.

[c8]   8.The computer system of claim 1 wherein the control unit is a logic circuit.

[c9]   9.The computer system of claim 1 wherein the control unit is a program code stored in a memory.

[c10]   10.The computer system of claim 1 wherein the first serial/parallel data transformer, the second serial/parallel data transformer, and the control unit are integrated on an application specific integrated circuit (ASIC).

[c11]   11.The computer system of claim 1 wherein the first serial/parallel data transformer is a universal asynchronous receiver/transmitter (UART).

[c12]   12.The computer system of claim 1 wherein the first serial/parallel data transformer is an inter-IC (I^2C).

[c13]   13.The computer system of claim 1 wherein the first serial/parallel data transformer is a universal serial bus (USB).

[c14]   14.The computer system of claim 1 wherein the first serial/parallel data transformer is a Serial Peripheral Interface (SPI).

[c15]   15.The computer system of claim 1 wherein the first serial/parallel data transformer is a Synchronous Serial Protocol interface (SSP).

[c16]   16.The computer system of claim 1 wherein the first se-

rial/parallel data transformer is a Microwire interface.

[c17] 17.The computer system of claim 1 wherein the first serial/parallel data transformer is an Inter IC Sound interface (I^2S).

[c18] 18.A serial/parallel data transformer module comprising:

a first serial/parallel data transformer comprising a parallel port and a serial port;

a second serial/parallel data transformer comprising a parallel port and a serial port; and

a control unit for selectively connecting in an electrical fashion the parallel port of the first serial/parallel data transformer to the parallel port of the second serial/parallel data transformer or the serial port of the first serial/parallel data transformer to the serial port of the second serial/parallel data transformer.

[c19] 19.The serial/parallel data transformer module of claim 18 further comprising a level shifter electrically connected between the serial port of the first serial/parallel data transformer and the serial port of the second serial/parallel data transformer for adjusting the level of data transmitted between the serial port of the first serial/parallel data transformer and the serial port of the second serial/parallel data transformer.

[c20] 20. The serial/parallel data transformer module of claim 18 wherein the control unit is a logic circuit.

[c21] 21. The serial/parallel data transformer module of claim 18 wherein the control unit is a program code stored in a memory.

[c22] 22. The serial/parallel data transformer module of claim 18 wherein the first serial/parallel data transformer, the second serial/parallel data transformer, and the control unit are integrated on an ASIC.

[c23] 23. The serial/parallel data transformer module of claim 18 wherein the first serial/parallel data transformer is a UART.

[c24] 24. The serial/parallel data transformer module of claim 18 wherein the first serial/parallel data transformer is an I^2C.

[c25] 25. The serial/parallel data transformer module of claim 18 wherein the first serial/parallel data transformer is a USB.

[c26] 26. The serial/parallel data transformer module of claim 18 wherein the first serial/parallel data transformer is a SPI.

[c27] 27. The serial/parallel data transformer module of claim

18 wherein the first serial/parallel data transformer is a SSP.

[c28]   28.The serial/parallel data transformer module of claim 18 wherein the first serial/parallel data transformer is a Microwire.

[c29]   29.The serial/parallel data transformer module of claim 18 wherein the first serial/parallel data transformer is an I^2S.